

## REMARKS

In an Office Action mailed on May 2, 2006, claims 45-48 and 50-54 were rejected under 35 U.S.C. 103(a) as being unpatentable over Nakajima in view of Nishida. The § 103 rejections are addressed below.

Regarding the § 103 rejection of claim 45, this claim recites providing a refresh signal and in response to the refresh signal, reading digital indications stored in the memory buffers, converting the digital indications into analog voltages and updating charge intensities on pixel cells using the analog voltages.

Contrary to the limitations of independent claim 45, the hypothetical combination of Nishida and Nakajima fails to teach or suggest the claim limitations. The Examiner contends that the act of providing a refresh signal is somehow inherent Nakajima. However, in order for a claim limitation to be inherent in a reference, the missing claim limitation must necessarily flow from the reference. *Ex parte Levy*, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990). The Examiner fails to show why providing a refresh signal necessarily flows from Nakajima, as contended by the Examiner; and for at least this reason, a *prima facie* case of obviousness has not been set forth for independent claim 45.

More specifically, although it is conceivable that between two successive frames, Nakajima's light modulator may be written with data that has not changed (and thus, it may be argued that the pixel cells are "refreshed"), there is no teaching or suggestion in Nakajima regarding a specific refresh operation. In other words, Nakajima fails to teach or suggest providing a *refresh signal* for purposes of initiating or causing a refresh operation, which might include the actions that are set forth in the last three lines of claim 45 (*emphasis added*). The Examiner refers to lines 13-19 in column 1 of Nakajima. However, this cited language merely describes driving pixels to form an image but fails to disclose a refresh signal; describe or hint at a refresh operation; or provide any basis why providing a refresh signal necessarily flows from Nakajima.

Thus, for at least the reason that the acts of providing the refresh signal and processing a refresh signal, as specifically recited in independent claim 45, do not necessarily flow from either Nakajima or Nishida, a *prima facie* case of obviousness has not been established for claim 45. As such, Applicant requests withdrawal of the § 103 rejection of claim 45.

Regarding the § 103 rejection of claim 50, claim 50 recites sense amplifiers that respond to a refresh signal. '

The Examiner merely concludes that, "it is inherent to the operation of such a circuit that the information will be changed during a refresh operation in response to sensing a refresh signal with an amplifier or any other appropriate sensing means." Office Action, 2-3. However, the Examiner refers to lines 13-19 in column 1, which provides no basis for establishing why responding with a sense amplifier to a refresh signal necessarily flows from Nakajima. Thus, for at least the reason that the hypothetical combination of Nakajima and Nishida fails to teach or suggest the sense amplifiers of claim 50, a *prima facie* case of obviousness has not been set forth for this claim.

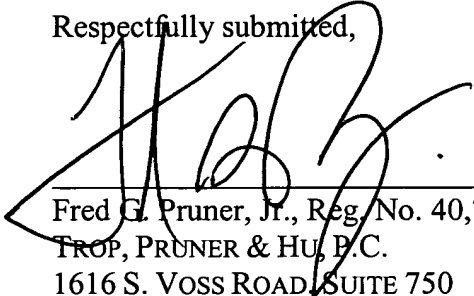
Claims 46, 47, 49, 51, 52 and newly-added claims 53 and 54 are patentable for at least the reason that these claims depend from allowable independent claims, for the reasons that are set forth above.

#### CONCLUSION

In view of the foregoing, withdrawal of the § 103 rejections and a favorable action in the form of a Notice of Allowance are requested. The Commissioner is authorized to charge any additional fees or credit any overpayment to Deposit Account No. 20-1504 (ITL.0312US).

Respectfully submitted,

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